Amendments to the Claims

1.   (Currently amended)   A method of determining a wireless system capacity, the method comprising the steps of:

determining a reverse noise floor;

obtaining a plurality of forward code domain measurements and corresponding reverse noise measurements, wherein each forward code domain measurement is obtained substantially simultaneously with the corresponding reverse noise measurement, and wherein each ~~of the plurality of~~ forward code domain measurement~~s include~~ indicates a number of active users using a wireless system; ~~a data set having a timestamp, a plurality of code IDs, and power levels for each code ID;~~

determining a plurality of Reverse Noise Rise (RNR) values, wherein determining each RNR value includes determining an increase of (i) a respective reverse noise measurement of the corresponding reverse noise measurements, relative to (ii) the reverse noise floor, and wherein each RNR value corresponds to the number of active users indicated by the forward code domain measurement that is obtained substantially simultaneously with the reverse noise measurement used to determine the RNR value; and[[,]]

determining a maximum number of users such that a ~~the~~ probability of exceeding a predetermined RNR value ~~reverse noise rise~~ is below a threshold.

2.   (Original)   The method of claim 1 wherein the forward code domain measurements comprise the number of active forward links.

- 4 -

3.   (Original)   The method of claim 1 wherein the step of determining a reverse noise floor is performed by obtaining reverse noise measurements during a period of inactivity.

4.   (Original)   The method of claim 1 wherein the step of determining a maximum number of users includes determining revere noise rise measurements by comparing the reverse noise measurements to the reverse noise floor.

5.   (Cancelled)

6.   (Original)   The method of claim 1 wherein the step of determining a maximum number of users includes, using measurements corresponding to those at or below a specific number of active sessions, forming a ratio of the number of measurements having an RNR below 3 decibels to the number of measurements corresponding to those at or below a specific number of active sessions, and comparing the ratio to a confidence level.

7.   (Original)   The method of claim 1 wherein the plurality of forward code domain measurements are obtained from a base station transceiver.

8.   (Canceled)

9.   (Currently amended) A method of determining a wireless system capacity, the method comprising the steps of:

~~modifying at least one system parameter;~~

- 5 -

determining a reverse noise floor;

obtaining a plurality of forward code domain measurements and corresponding reverse noise measurements, wherein each forward code domain measurement indicates a quantity of active users;

determining at least one ratio that is at or above a probability threshold, wherein each ratio comprises a ratio of a respective first number to a respective second number,

wherein each first number indicates how many of the reverse noise measurements (i) correspond to forward code domain measurements that indicate a number of active users at or below a respective threshold number of active users, and (ii) have a Reverse Noise Rise (RNR) that is below an RNR threshold, and

wherein each second number indicates how many of the reverse noise measurements correspond to forward code domain measurements that indicate the number of active users at or below the respective threshold number of active users, and[[,]]

determining a maximum number of users, wherein the maximum number of users is a greatest threshold number of active users used in determining the at least one ratio. ~~such that the probability of exceeding a predetermined reverse noise rise (RNR) is below a threshold, wherein the probability is determined from a ratio of the number of measurements having an RNR below 3 decibels to the number of measurements corresponding to those at or below a specific number of active sessions~~.

10.   (Cancelled)

- 6 -

11.   (Original)   The method of claim 9 wherein the step of determining a reverse noise floor is performed by obtaining reverse noise measurements during a period of inactivity.

12.   (Cancelled)

13.   (Original)   The method of claim 9 wherein the forward code domain measurements and reverse noise measurements are obtained substantially simultaneously.

14.   (Previously Presented)   The method of claim 9 wherein the step of determining a maximum number of users includes comparing the ratio to a confidence level.

15.   (Original)   The method of claim 9 wherein the plurality of forward code domain measurements are obtained from a base station transceiver.

16.   (Original)   The method of claim 9 wherein the forward code domain measurements include a plurality of data sets, each set having a timestamp, a plurality of code IDS, and power levels for each code ID.

17.   (Currently amended) The method of claim 9, further comprising:
modifying at least one system parameter,
wherein the ~~said~~ at least one system parameter is a power control parameter.

18.   (Currently amended) The method of claim 9, further comprising:

modifying at least one parameter,

wherein the ~~said~~ at least one system parameter is a mobile access probe parameter.

19.   (New)   The method of claim 1, wherein each forward code domain measurement of the plurality of forward code domain measurements includes a data set having a timestamp, a plurality of code IDs, and power levels for each code ID.

20.   (New)   The method of claim 1, further comprising:

displaying a visual indicator that depicts each RNR value of the plurality of RNR values versus a corresponding number of active users, and

wherein the visual indicator is selected from the group consisting of (i) a graph, (ii) a histogram, and (iii) a probability distribution function plot.

21.   (New)   The method of claim 9, wherein the RNR threshold is 3dB.

22.   (New)   The method of claim 9,

wherein each forward code domain measurement is obtained substantially simultaneously with the corresponding reverse noise measurement,

the method further comprising:

determining a plurality of Reverse Noise Rise (RNR) values,

wherein determining each RNR value includes determining an increase of (i) a respective reverse noise measurement of the corresponding reverse noise measurements, relative to (ii) the reverse noise floor, and

- 8 -

wherein each RNR value corresponds to the number of active users indicated by the forward code domain measurement that is obtained substantially simultaneously with the reverse noise measurement used to determine the RNR value.